

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: January 9, 2002, 21:33:40 ; Search time 4961.33 Seconds
(without alignments)
13024.702 Million cell updates/sec

Title: US-09-117-447-1
Perfect score: 3687
Sequence: 1 atgagtaggaaaaaagctgt.....tlacatctataatgaagtaa 3687

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 17159718 seqs, 8763200856 residues

Total number of hits satisfying chosen parameters: 34319436

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Pending Patents_NA_Main:*

1: /cgn2_6/ptodata/1/pna/PCTUS_COMB.seq:*
2: /cgn2_6/ptodata/1/pna/US06_COMB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	3687	100.0	3687	18 US-09-463-402-1	Sequence 1, Appl1
3	3599	97.6	3768	18 US-09-463-402-12	Sequence 12, Appl1
4	3598.2	97.6	4988	18 US-09-463-402-11	Sequence 11, Appl1
5	71.4	1.9	7814	55 US-60-226-176-1986	Sequence 1986, Ap
6	71.4	1.9	7814	56 US-60-233-468-1986	Sequence 1986, Ap
7	71.4	1.9	7814	64 US-60-313-371-1986	Sequence 1986, Ap
8	62.6	1.7	3579	1 PCT-US99-26796-232	Sequence 232, App
9	58.8	1.6	957	18 US-09-457-659-2159	Sequence 2159, Ap
10	58.8	1.6	957	25 US-09-652-127-5964	Sequence 5964, Ap
11	57.8	1.6	3653	1 PCT-US98-12764-33	Sequence 33, Appl1
12	57.6	1.6	186935	55 US-60-226-176-1976	Sequence 1976, Ap
13	57.6	1.6	186935	56 US-60-233-468-1976	Sequence 1976, Ap
14	57.6	1.6	186935	64 US-60-313-371-1976	Sequence 1976, Ap
15	56.8	1.5	4248	18 US-09-407-679-1	Sequence 1, Appl1
16	55	1.5	1141	31 US-09-806-708A-22	Sequence 22, Appl1
17	54.6	1.5	1141	31 US-09-806-708A-22	Sequence 22, Appl1
18	54.6	1.5	22306	36 US-60-038-697-727	Sequence 727, App
19	54.6	1.5	22306	37 US-60-046-714-726	Sequence 726, App
20	53.8	1.5	8307	58 US-60-258-275-230	Sequence 230, App
21	53.4	1.4	7218	8 US-08-466-194-14	Sequence 14, Appl1
22	53	1.4	7253	16 US-09-268-347-35	Sequence 35, Appl1
23	53	1.4	1830121	8 US-08-426-787-1	Sequence 1, Appl1
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36	51.8	1.4	7932	26 US-09-663-779-1221	Sequence 1221, Ap
37	51.8	1.4	35515	1 PCT-US98-12764-5	Sequence 5, Appl1
38	51.4	1.4	540	1 PCT-US00-41008-1	Sequence 1, Appl1
39	51.4	1.4	924	53 US-60-207-458-18907	Sequence 18907, A
40	51	1.4	2241	13 US-08-913-196-3	Sequence 3, Appl1
41	51	1.4	2367	13 US-08-913-196-1	Sequence 1, Appl1

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9/463402
Have 2 common nucleotides

42	51	1.4	2394	12	US-08-827-356-730	Sequence 730, App	
43	51	1.4	2394	14	US-09-036-082-1	Sequence 1, Appli	
44	51	1.4	2394	23	US-09-611-529-506	Sequence 506, App	
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ALIGNMENTS

RESULT 1

US-09-117-447-1

; Sequence 1, Application US/09117447

; GENERAL INFORMATION:

; APPLICANT: LOBITZ, Werner

; APPLICANT: SLEYTR, Uwe

; APPLICANT: KUEN, Beatrix

; APPLICANT: TRUPE, Michaela

; APPLICANT: HOWORKA, Stefan

; APPLICANT: RESCH, Stephanie

; APPLICANT: SCHROLL, Gerhard

; APPLICANT: SARA, Margit

; TITLE OF INVENTION: RECOMBINANT EXPRESSION OF S-LAYER PROTEINS

; FILE REFERENCE: 100564-08013

; CURRENT APPLICATION NUMBER: US/09/117,447

; PRIOR FILING DATE: 1998-12-02

; PRIOR APPLICATION NUMBER: PCT/EP97/00432

; PRIOR FILING DATE: 1997-01-31

; PRIOR APPLICATION NUMBER: DE/196 03 649.6

; PRIOR FILING DATE: 1996-02-01

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: Patent In Ver. 2.1

; SEQ ID NO 1

; LENGTH: 3687

; TYPE: DNA

; ORGANISM: Bacillus stearothermophilus

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (1)..(3684)

; NAME/KEY: sig_peptide

; LOCATION: (1)..(90)

; NAME/KEY: mat_peptide

; LOCATION: (91)..(3684)

US-09-117-447-1

Query Match 100.0%; Score 3687; DB 15; Length 3687;
Best Local Similarity 100.0%; Pred. NO. 0;
Matches 3687; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 3661 gatactattacattctatcaatgaagtaa 3687

RESULT 2

US-09-463-402-1
; Sequence 1, Application US/09463402
; GENERAL INFORMATION:
; APPLICANT: Lubitz, Werner
; APPLICANT: Resch, Stephanie
; TITLE OF INVENTION: Secretion of Carrier-bound Proteins into the Periplasm
; TITLE OF INVENTION: and into the Extracellular Space
; FILE REFERENCE: 05649059
; CURRENT APPLICATION NUMBER: US/09/463,402
; CURRENT FILING DATE: 2000-01-31
; PRIOR APPLICATION NUMBER: DE19732829.6
; PRIOR FILING DATE: 1997-07-30
; PRIOR APPLICATION NUMBER: PCT/EP98/04723
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 3687
; TYPE: DNA
; ORGANISM: Bacillus stearothermophilus
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US-09-463-402-1

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Best Local Similarity 100.0%; Pred. No. 0;
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RESULT 4
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 ; GENERAL INFORMATION:
 ; APPLICANT: Lubitz, Werner
 ; APPLICANT: Resch, Stephanie
 ; TITLE OF INVENTION: Secretion of Carrier-bound Proteins into the Periplasm
 ; FILE REFERENCE: 05649059
 ; CURRENT APPLICATION NUMBER: US/09/463,402
 ; CURRENT FILING DATE: 2000-01-31
 ; PRIOR APPLICATION NUMBER: DE19732829.6
 ; PRIOR FILING DATE: 1997-07-30
 ; PRIOR APPLICATION NUMBER: PCT/EP98/04723
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: PatentIn Ver. 2.1

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QY	2485	gatgcaaatgtgtaaagtaacagcgtctgtgtgttacaattaactgtgtcttgacaataacgac	2544
Db	3649	gatgcaaatgtgtaaagtaacagcgtctgtgtgttacaattaactgtgtcttgacaataacgac	3708
QY	2545	aaagatgcgaaattgcgtctgtgtagtagataagtccttctactgtatgtaattgtctgata	2604
Db	3709	aaagatgcgaaattgcgtctgtgtagtagataagtccttctactgtatgtaattgtctgata	3768
QY	2605	gctgttaatgttaattaaaggaaaaagatatlttaattcgttacaacagctgtagacacact	2664
Db	3769	gctgttaatgttaattaaaggaaaaagatatlttaattcgttacaacagctgtagacacact	3828
QY	2665	gtagcttctgtgaaagctgtctgtgcacaagaatggtccaacgcttctgtcgtcatccca	2724
Db	3829	gtagcttctgtgaaagctgtctgtgcacaagaatggtccaacgcttctgtcgtcatccca	3888
QY	2725	acaagcactgcaattgtatacaactaagaagcttatagttaattcaatgtaaacgtattta	2784
Db	3889	acaagcactgcaattgtatacaactaagaagcttatagttaattcaatgtaaacgtattta	3948
QY	2785	gcggaagttaaaacctgagaacaatcglttgtttaaagatgcagcagtlaatgcggtagctgt	2844
Db	3949	gcggaagttaaaacctgagaacaatcglttgtttaaagatgcagcagtlaatgcggtagctgt	4008
QY	2845	actgtaacagcatttagacggttctacaataaattgttatltcaactccaatccaagaattta	2904
Db	4009	actgtaacagcatttagacggttctacaataaattgttatltcaactccaatccaagaattta	4068
QY	2905	aaagctgtgtaacagttactctgtlaacaatltgacggtgtgagagataaaatgaatgaacaca	2964
Db	4069	aaagctgtgtaacagttactctgtlaacaatltgacggtgtgagagataaaatgaatgaacaca	4128
QY	2965	atctctaataatatactactcgttccaagactgtatatctgcgaatccaacgtttatctcaatc	3024
Db	4129	atctctaataatatactactcgttccaagactgtatatctgcgaatccaacgtttatctcaatc	4188
QY	3025	agcattgtctgacggtgtgcagttaaagttgacccgttctaanaacaattlacaatttgattcagc	3084
Db	4189	agcattgtctgacggtgtgcagttaaagttgacccgttctaanaacaattlacaatttgattcagc	4248
QY	3085	gattcagttccaaaacccaacaatcactctttaaagaagctgcgcggaacttcaattactaat	3144
Db	4249	gattcagttccaaaacccaacaatcactctttaaagaagctgcgcggaacttcaattactaat	4308
QY	3145	tacactttagttaaattgtaaataatgaaaataaaaacatacaaaaattgtlatccacaagaagt	3204

Db	4309	tacacttagtaaatgtcaataatgaaalaaacatacaaaatgttatccacaaagt	4368
QY	3205	gtaacacttgacgaagttactcaatatgagttagcagtttcaaaagatttcaactggt	3264
Db	4369	gtaacacttgacgaagttactcaatatgagttagcagtttcaaaagatttcaactggt	4428
QY	3265	actgatatgtagaagaaagttacattcatcacaggttcgttgctactgcgaagtaaaa	3324
Db	4429	actgatatgtagaagaaagttacattcatcacaggttcgttgctactgcgaagtaaaa	4488
QY	3325	cctgctctagtaggcgttgcgttcatagtgaatggaacaagctatactcaggaatgctgcagca	3384
Db	4489	cctgctctagtaggcgttgcgttcatagtgaatggaacaagctatactcaggaatgctgcagca	4548
QY	3385	acacgacttcggtctgtagctgacttcggttgcgagccagttgccctcaattctcagaa	3444
Db	4549	acacgacttcggtctgtagctgacttcggttgcgagccagttgccctcaattctcagaa	4608
QY	3445	ggtatcgatttaacgaatgccaactgttgacagtaacaataattactgtagtaaaaactggt	3504
Db	4609	ggtatcgatttaacgaatgccaactgttgacagtaacaataattactgtagtaaaaactggt	4668
QY	3505	gaagttattccaagaagagtgtagacgcagacacatgtagcaggtgtactaagagaca	3564
Db	4669	gaagttattccaagaagagtgtagacgcagacacatgtagcaggtgtactaagagaca	4728
QY	3565	ttagtaattacaacagttactcctttagtacttgataacagcaagacttaagaattggt	3624
Db	4729	ttagtaattacaacagttactcctttagtacttgataacagcaagacttaagaattggt	4788
QY	3625	gtaagtgcagttaaagatgcagcaggtaatgttgcagatactattacattctataatga	3684
Db	4789	gtaagtgcagttaaagatgcagcaggtaatgttgcagatactattacattctataatga	4848
QY	3685	taa 3687	
Db	4849	taa 4851	

```

RESULT      5
US-60-226-176-1986
; Sequence 1986, Application US/60226176
; GENERAL INFORMATION:
;   APPLICANT:      Ring, Huijun Z.
;   APPLICANT:      Malsen, Gareth
;   APPLICANT:      Townley, David
;   APPLICANT:      Morris, macdonald
;   TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
;   FILE REFERENCE:  GX-0013-1 P
;   CURRENT APPLICATION NUMBER: US/60/226,176
;   CURRENT FILING DATE:  2000-08-16
;   NUMBER OF SEQ ID NOS:      2447
;   SOFTWARE:        PERL Program
;   SEQ ID NO 1986
;   LENGTH: 7814
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: GBI:AC024253_3_000004
US-60-226-176-1986

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Query Match	1.98;	Score 71.4;	DB 55;	Length 7814;
Best Local Similarity	41.48;	Pred. No. 3.4e-05;		
Matches 735;	Conservative	0;	Mismatches 1018;	Indels 24;
				Gaps 3;
QY 1299	tcacgtaattgcatctactctctgtgtctcaacaattactactatctacgtttaaagaagcgtagt	1358		
Db 2698	tactgttattactactgcaatttcgtgtctactactgctgctgtgtgtgtgtgtgtgtgtgtgt	2757		
QY 1359	aactggtaaacaataataaactgtgtatcaataatgtttaaacattactgtgttacaatgc	1418		

Db 2758 tgctgttgaattgtagtctattgctgttgcgtgacttctgtctattgtctgttc 2817
OY 1419 agaagcttacgagttagtgctcaactgcaaacgcacccaactgttgcaccgtcc 1478
Db 2818 tgttgcgataactgttgcatacgttgccttctgttattgttgcgtgtgcgtgc 2877
OY 1479 taactacttagtggtacaacttatactactgttcccttaacaacaatgttgggtaa 1538
Db 2878 taactgtgtgtgtgcgtgccttattgttgcgtgcgtgtgtgtgtgtgtgc 2937
OY 1539 attgctgtgtgtgtgaatgaagctggaactattatcctgtgtlcaattcacacaac 1598
Db 2938 tgttgcgttttaactgctgctattgttgcgtgctgtgcgtgtgtgtgtgtgc 2997
OY 1599 gtttgcactaagttagacgaatctactttagctgataacttgtattagtgtgaaaaa 1658
Db 2998 tgttgcgataactgtgtgatacgttgccttctgttattgtgtgtgtgtgtgtgc 3057
OY 1659 atctgtacagttgtgtgtcttgcgaactaaataataatgagacgctaaatgtgtaactt 1718
Db 3058 taactgc 3117
OY 1719 agtgcacaaagcgagaccttaagaaataacatctatcaaatcaaatlaaaaagctt 1778
Db 3118 tgctattgc 3177
OY 1779 gaagtcgcgataaaggtatttgaatttaggcactgtttaaagcaaaaacatatgagttcaaac 1838
Db 3178 tattactgttgcataatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 3237
OY 1839 tcaagacttaactgtcctcaagttatttagcgtaacgctcaaaaatggcgagcgtgatt 1898
Db 3238 tatgttaattattgc 3297
OY 1899 aaaaglaactgaagctcaagaatttactgttgaagttctcagagaatttaaatatttaa 1958
Db 3298 tgcgtgc 3357
OY 1959 tgctacaacgcttctcggttagcaaatcacatacaggttcaagttgtgtgtgtgtgtgc 2018
Db 3358 tgttgcgtgc 3417
OY 2019 tgcacaacttactgtctcttcaagcaagtgacatcatccaagctagtgttgaacggttac 2078
Db 3418 tgctgtactactgc 3477
OY 2079 tggccaagatggaacatacaaaagtgaagttgtgtgtgtgtgtgtgtgtgtgtgc 2138
Db 3478 tgctgc 3537
OY 2139 gtacaacttagtagtgttcggtgaaggtgcaacagctcctgtttaaagatgtgcgaatgc 2198
Db 3538 tgcgataactgc 3597
OY 2199 aaatacttagcaactaactatatacatattacaactgaaggtcaagacgttaacgc 2258
Db 3598 tgc 3657
OY 2259 accaagcgtttacaanaagttatcaaaaggtgattctttaaagaagcgtgatacttactac 2318
Db 3658 tgctactgttgcataatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 3714
OY 2319 acttaacgaacgttgatgcaggtcaaaaattcaactatccaatttagcgaagaattaaaaac 2378
Db 3715 tgctgc 3774
OY 2379 ttctagtgttctttagtgggtgcaagtaactgtcgagaatttaacaacaacggtatg 2438
Db 3775 tgctactgttattactgcgattctgttgcactgtgtgtgtgtgtgtgtgtgtgc 3834
OY 2439 ggtagatgc 2498

Db 3835 tgatgctgtgttlaactgtgataactattgtgtgtgtgtgtgtgtgtgtgc 3894
OY 2499 agtaacagctgtgtgtgttacaalttaactgtgtgtgtgtgtgtgtgtgtgc 2558
Db 3895 gnetgtactgc 3954
OY 2559 ggcgtgc 2618
Db 3955 tgatgc 4014
OY 2619 taaggaanaagatatattttaaattcgttacaacagctgtgagacacatgtgtgtgtgaa 2678
Db 4015 tgctgttattgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 4056
OY 2679 agctgc 2738
Db 4057 tgctgtactactactgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 4116
OY 2739 tgatacaactaagagcttattagtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 2798
Db 4117 tggtgtactactatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 4176
OY 2799 tgaagaacatcgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 2858
Db 4177 tgctacttctgc 4233
OY 2859 agacggtlclacaanaattgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 2918
Db 4234 tgatttgcatacttctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 4293
OY 2919 ttactctgtacaactgtgacgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 2978
Db 4294 tgattctgc 4353
OY 2979 taactcgttcaagacgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc 3038
Db 4354 tggtttgc 4413
OY 3039 tgcagtttaacyttgacggttcttaaaaacattacaatt 3075
Db 4414 tgctgc 4450

RESULT 6
US-60-233-468-1986
; Sequence 1986, Application US/60233468
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, MacDonald
; APPLICANT: Valdes, Ana
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
; FILE REFERENCE: GX-0013-2 P
; CURRENT APPLICATION NUMBER: US/60/233,468
; CURRENT FILING DATE: 2000-09-18
; NUMBER OF SEQ ID NOS: 2488
; SOFTWARE: PERL Program
; SEQ ID NO 1986
; LENGTH: 7814
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GBI:AC024253_3_000004
US-60-233-468-1986

Query Match 1.9%; Score 71.4; DB 56; Length 7814;
Best local Similarity 41.4%; Pred. No. 3.4e-05;
Matches 735; Conservative 0; Mismatches 1018; Indels 24; Gaps 3;
OY 1299 tccagtaattgcacttctgtgttctacaattactactaactgtttaaagaagcgttagt 1358

Db	2698	tactgttattactgcaatttcctgttgc	tactgctgcgtgttgcctatgtc	1418
Qy	1359	aactggtaaacatatataaactgtcat	caataatgtttaaaacattactgtt	1418
Db	2758	tgctgtgtttaaattgtgtatcgtat	tgtctgtctgctgttctgtcatct	2817
Qy	1419	agaagcctacgagttagtttcactgc	taaacgcatacgaaccaactgttgc	1478
Db	2818	tgctgtgatactgttgcatacgttgc	cttctgttattgttgcgtgttgc	2877
Qy	1479	tactactttaggtgglacaacltlat	ctactggtctcttacaacaanaatg	1538
Db	2878	tactgttgcgtgtgtgcgtccttat	gttgcgtgcgtgtgcgtgtgtgc	2937
Qy	1539	attgctgtgtgtgtgaatgaaagct	gnaacttattccctgctcttcaat	1598
Db	2938	tgctgtctgttttactgcctgtat	gttgcgtatgcctgcgtgtgtgc	2997
Qy	1599	gtttgctactaagttagacgaatct	actttagctgataactttgtlatg	1658
Db	2998	tgctgtgataactgttgcatacgt	ttgtcttattgttgcgtgtgtgc	3057
Qy	1659	atctgtgacagttgttgccttcga	actaaataataatgcagacgttaa	1718
Db	3058	tactgttgtgtgtgcgtgccttat	gttgcctgcgtgtgtgtgtgc	3117
Qy	1719	agtgccaaaagcgcgaacttaaga	anaatacatalcacaattcaaaat	1778
Db	3118	tgctattgtgtcctgtgtgtgtgc	tatgtctactgttgcattgtgtgc	3177
Qy	1779	gaagtcogataaagtgatgtgaat	taggcactgtttagcgaanaacata	1838
Db	3178	tattactgttgcataatgcctgc	tactgcgtgtgtgtgcctactgtt	3237
Qy	1839	tcaagacttaactgctccatacagt	tattagcgttaacgtctaaaatgc	1898
Db	3238	tatgtaatattatgtcgtgcgtgc	tactactgtgtgtgtgcctactgt	3297
Qy	1899	aaaagtaactgaaagctcaagaat	ttactgttgaagttccagagaatt	1958
Db	3298	tgctgttgcgtgttgaatgtgat	gcataatgcctgtgtgatgcctt	3357
Qy	1959	tgctacaacggtttcgggtagcaca	atcacatacgcgtcaagttgtctg	2018
Db	3358	tgctgtcgttgcgtgatactgttgc	ataatgttgccttctgtgtgc	3417
Qy	2019	tgcacaactatctgcctctacagca	agtgacatcatccagctagttgtg	2078
Db	3418	tgctgtactactgttgcgtgtctc	tattgttgcgtgcgtgtgtgtgc	3477
Qy	2079	tggccaagatggaacatacaaaagt	aaagltgctgtcaaccaattgaac	2138
Db	3478	tgctgcgttgcctgtttcactgc	tgcatalgttgcgtgttgcgtatg	3537
Qy	2139	gtacaaattagtaagtctcogttaa	aggtgcacaacagctcctgtttaa	2198
Db	3538	tgctgatactgttgcataccgttgc	tttgttattgttgcgtgttgcgtc	3597
Qy	2199	aaatactttagcaactaataatact	atacatattacaactgaaagtcaga	2258
Db	3598	tgctgttgcgtgcgtgcctcttat	gttgcgtgcgtgtgtgtgtgtgc	3657
Qy	2259	accaaacggttacaaaagtcattca	aaagtgatctctttaaagaacgctg	2318
Db	3658	tgctactgttgcataatgcgt--	tgctgclactaatactgttgcata	3714
Qy	2319	acttaagaaagttgatgcaggctcaa	aaattcacataccaatttagcgaag	2378
Db	3715	tgctgcgtgtgtgtgcctactgtt	gttgcatactagtgtaatgatgtgc	3774
Qy	2379	ttctagtgttctttagtgggtgc	caagtaactgtcagagaatttaaca	2438

D	b	3775	tgctaactgttatttaactgcgaattcttgttgctaactgctgctgtgtgtgtgtgtgtgtat	3834
O	y	2439	ggtagatgctcgtlactggaacaactgtatacagttgtctccaaagacagatgcaaatgtaa	2498
D	b	3835	tgatgtcgtcgtttaatcgtagatacattgtgtgtgatgtcgtgcgtgcatattgtgt	3894
O	y	2499	agttaacagctgctgtgtttacattaacatggtcttgacaataacgacaagatgcgaatt	2558
D	b	3895	gnctgtactcgtgncatatgtgtgcttctgtaattgttcgtctctgtgtgtcgcgcgtgtac	3954
O	y	2559	gcgtctggtagtagataagtccttctaactgatygaattgtcgtatgttagctgytaat	2618
D	b	3955	tgatgtcgtgtgctgctataattgttcgcgcgtgtataattgctgtgtttactgcgtcatattg	4014
O	y	2619	taagaagaaaaagatatcttaattcgtttacaacagctggaagacacactgtaactctgtgaa	2678
D	b	4015	tgtgttattgttgtgtgatgtgct-----actgttgcatattgtgt	4056
O	y	2679	agctgtcgtctgacaaaagatggtccaacgccttcgtctgcattcccacaagcactgcaa	2738
D	b	4057	tgtctgaactaattactgttgtcatatgtcgtcgtclactgctgtgtgtgtgtcgtactgt	4116
O	y	2739	tgtataaactaagaagccttatagttgaattcaatgaatgaacctgattlagcggaagttaaoc	2798
D	b	4117	tgttgtaactatgtaaatgattgctgtcgtcgtgtcgtgtgtgtgtgtgtgtactaac	4176
O	y	2799	tgaagaacatcgttgttaagatgcagcaggtaatgcgttagctggtactgtaacagcalt	2858
D	b	4177	tgciaactctgttgt--gctgcgcgcgttatgtcgtgcgaactctgttctgtactgc	4233
O	y	2859	agacggttctaacaataatttgtatacactccatctcaagaattaaagcgtgtacagt	2918
D	b	4234	tgaatttgcatattctgtgctatctgtcgtcgtcgtgtgtgtgtccttaattgtagatggtc	4293
O	y	2919	ttactcgttaacaatttgacggtgtgtgagagataaaglagttaaacaatctcnaaalacat	2978
D	b	4294	tgaatcgttgtcatattgtgtcgtcatcgtclaanaaatgttgtcgtcgttgttgtcatattgt	4353
O	y	2979	tacttcgtticaagactgatatctgcgaatccaaacglttatcttcaatcacgaattgtgcag	3038
D	b	4354	tgtgtttgttgttaactgcttctcgtctgccttgttattgttgtcgtcgtcgtgtgtgttc	4413
O	y	3039	tgcagtttaacglttgaccggttcttaaaacaattacaalt	3075
D	b	4414	tgtcgtcgtcatgatgctgtttaactggttaactattgtcatt	4450

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RESULT 7
US-60-313-371-1986
; Sequence 1986, Application US/60313371
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, Macdonald
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
; FILE REFERENCE: GX-0013-5 P
; CURRENT APPLICATION NUMBER: US/60/313,371
; CURRENT FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 2447
; SOFTWARE: PERL Program
; SEQ ID NO 1986
; LENGTH: 7814
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GBI:AC024253_3_000004
US-60-313-371-1986

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Query Match	1.9%;	Score 71.4;	DB 64;	Length 7814;
Best Local Similarity	41.4%;	Pred. No. 3.4e-05;		

Best Local Similarity 43.7%; Pred. No. 0.0026;
Matches 336; Conservative 0; Mismatches 424; Indels 9; Gaps 1;

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OY 4 gataggaataaagctgtgaaactagcaacagcaagctgtatgcaagctgattgtc 63
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1183 gatgatgaagaagatcacagatgatgaagaagatcacagatgatgaagaagatcacagatgat 1242

OY 64 gctgcaatcccaacgctcttgagcggtacagatgtagcaacagtagtaagccaagca 123
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1243 caagaaacaagaagaacagaagtagacgaaataaacaagaataaagccgaagaagaa 1302

OY 124 aaagcacagttcacaataaagcatatactatacttacagccatacagtaacggaactggtgaa 183
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1303 ttagaagaagaacaagaagaatlcagaaataagcaagaagaatlcagaaataagataagaa 1362

OY 184 ttcccaacattacagatgtatatgtctgtaatacaacaagcgaaataacgatacgtgtat 243
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1363 gaatcagaataaagataaagaagaatlcagaaataaagcaataaagaaactgtaagaagatgaa 1422

OY 244 gcggtagcattagtgaataaagcaggtggtcgcggaataaagacgcttacttagctgtatta 303
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1423 gaaaaaactgaagacgaaaaaaggaacggaagtatacaaaaaaagaaacagatgtatgaa 1482

OY 304 caaaaaaatatgaactacgttltcaaaagcaaaccttaaatctggtgaagctcgtgtta 363
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1483 aaaaaaagaagaagagataatgtgagaggaacagatgtatgaagaacaaagaataaagaa 1542

OY 364 gcaacttacatcgatgttacaactatgcacaataatagacgaatctgcgccaagagcta 423
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1543 gaagacgacgaagaagaacaaagttagaagaataaagaacagaaa-----aagacgaa 1593

OY 424 gaggtctgtgttcaagcaaaagatttagaaaaagcagaacaatactataccaaaaattcct 483
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1594 gagggacacagattatgaagaagatatacagatgattcagacaagaatgaagaatacaaaagta 1653

OY 484 tatgaatttaaaactcgcacagtcattttagatcgcgtatatgttaaaacaactcgtgat 543
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1654 gaagaaaaaagaacaagaagaagacgaagaagaactgtaagaagacgaaaaaagaatacagaa 1713

OY 544 ttactcgtctacatttaaaagcaaaagcacaagaacttcgcgcagcagcttaattatgat 603
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1714 gtagaaaaaaaagaacaagaataaagacgaagaagggacagattatgaagaagatacagat 1773

OY 604 attacggttgcaatgaagcgcggaagtacaaagcgtgtgaaagcaggaatttagac 663
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1774 gattcagacaagaatgtagaaacagaagtagaagaacagacgcagaagacaaagaagaa 1833

OY 664 aaagctaagctgtgtgatcaaatcaatcaatctacccaataagtaacagatgcttcc 723
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1834 aacgaagaaggaacagatgatgaagaagacaaagttagaagaatacagacctaagacgaccaa 1893

OY 724 aaaactgaactaacagaagtagcgaataaagcattagatgcagatgaag 772
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1894 gaagaaagcggagaagaagaataaagaagacgacaaagaataaagacaaag 1942
```

RESULT 9

```
US-09-457-659-2159
; Sequence 2159, Application US/09457659
; GENERAL INFORMATION:
; APPLICANT: Gearing, David P.
; APPLICANT: Comrack, Christopher
; APPLICANT: Holtzman, Douglas A.
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES DERIVED FROM
; TITLE OF INVENTION: HUMAN NATURAL KILLER CELL AND HUMAN BRONCHIAL EPITHELIUM
; TITLE OF INVENTION: LIBRARIES
; FILE REFERENCE: 1600.1071001
; CURRENT APPLICATION NUMBER: US/09/457, 659
; CURRENT FILING DATE: 1999-12-09
; EARLIER APPLICATION NUMBER: 60/111,677
; EARLIER FILING DATE: 1998-12-10
; EARLIER APPLICATION NUMBER: 60/113,891
; EARLIER FILING DATE: 1998-12-28
```

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; NUMBER OF SEQ ID NOS: 2259
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2159
; LENGTH: 957
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(957)
; OTHER INFORMATION: n = A,T,C or G
US-09-457-659-2159
```

Query Match 1.6%; Score 58.8; DB 18; Length 957;
Best Local Similarity 32.9%; Pred. No. 0.011;
Matches 277; Conservative 0; Mismatches 562; Indels 3; Gaps 1;

```
OY 105 aacagtagtaagccaaagcaaaagcacagttcaaaaaagcatatactatactacagccatac 164
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 14 aaaaaaanaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaa 73

OY 165 aglaacygaactgtgtgaaatcccaacattacagtgatatagtgtataacacaagaac 224
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 74 aannannannnggaactcgyaaacncataaanaatananaaanaaanaaanaaanaaanaaana 133

OY 225 gaaaaaacgataccgtgtgtagcgttagcattagtgtgataaagcaggtggtcgcgaaaaaaga 284
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 134 aaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaanaaaaaaana 193

OY 285 cgttacttagctgtatttacaaaaaagaatatgaacttacgcttltcaaaagcaaaccttaa 344
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 194 aanaannnnaaanaanaanaanaanaanaannnnnaaaaaaanaanaanaanaanaanaanaana 253

OY 345 atctggcgaagctcgtgttagcaacttacatcgatgcttacaactatgcaaca-----aatl 401
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 254 aaaaaaanaannanaanaanaannnnnaaaaaaanaannnnaaaaaaattnnanaanaanaanaa 313

OY 402 agacgaaatggtccaaagcttagaggtcgtgtgttaagcaaaagatttagaaaaagcaga 461
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 314 aaaaaaanaannnaaaaaaanaaaaaaanaaaagaannnnnaaaaaaanaaaaaaanaanaana 373

OY 462 acaatlatcacaaatcttaltgaatlaaactcgcacagtcattttagatcgcgt 521
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 374 aanaaaaaannnaaaaaaanaannnaaanaanaanaaaaaaanaaaaaaanaanaantcaaan 433

OY 522 atatgtlaaacacactcgtgatttacttcgctctacatttaagcaaaagccagaagact 581
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 434 nanaaaaaaanaaaaaaagaannnnnaannnaanaanaanaangaaanaaaaaaanaaaaaaanaa 493

OY 582 tcgcgacagcttaattatgatatataccggttgcaatgaaagcgcggaagtacagaagc 641
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 494 aaaaannnaannnaanganaaaaaaanaanaanaantlaanaanaanaaaaaaanaaaaaaana 553

OY 642 tgtgaaagcaggaalttagacaagaagctaaagctgtgttgatcaaatcaataactt 701
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 554 nnaaaaaaanaanaanaanaaataaagnnaaagaanaaataaacacmnaaaaaaanaa 613

OY 702 accaaagtaacagatgcttcaaaaactgaactaacagaagtagcgaataaagcattaga 761
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 614 naannnaaaaaanaanaanaaaaaaanaaaannnaannanantanaanaanaaaacaannaa 673

OY 762 tgcagatgaagctgcttactccaagaagtgtgaagtgtaagtcgattacacatcaaaa 821
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 674 nanaaaanaanaanaanaaantlncanaannngnaaanaanaanaaaaaaanaaaaaaanaaan 733

OY 822 caaagctgtgtaattacacagcagttacaggtgaagcgaacactaaaatttacaactttcagc 881
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 734 naanaaaaaaagaagaagaaaaaanaaaacaaanaltacaacaanmnaaaaaaanaaanaa 793

OY 882 tgcgtcaaatgaagatcacgtaaacgtaaatctgtacgtatctataaagtgagcgttaa 941
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 794 annaanaaangaaactnnnaaanaanaanaannnaannnaanncgagaanaaagaaaaanaa 853
```

```

      Oy      942 ca 943
      |
      Db      854 aa 855

RESULT 10
US-09-652-127-5964
; Sequence 5964, Application US/09652127
; GENERAL INFORMATION:
; APPLICANT: Shyjan, Andrew W.
; TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES
; TITLE OF INVENTION: THEREFOR
; FILE REFERENCE: 1600.1183-001
; CURRENT APPLICATION NUMBER: US/09/652,127
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/151,134
; PRIOR FILING DATE: 1999-08-30
; NUMBER OF SEQ ID NOS: 10475
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5964
; LENGTH: 957
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(957)
; OTHER INFORMATION: n = A,T,C or G
US-09-652-127-5964

```


Db	1445	TACAGAGACGAAACAAACAGAAATTAGCTAAACAGAGAAGACACACCAAAAACGAAA	1504
QY	735	aacagaagttagcgaaaaaagcatttagatgcagatgaagctgcgcttacttccaaaagttga	794
Db	1505	AGCAGAACACAGAAAAACAAAAGAGAGAGAGACAGACAAAAGAGAGAGAGAGA	1564
QY	795	aagtgtaagtcgcatttaacacctcaacaagaagctgttgtaattaacagcagttaccagtgaa	854
Db	1565	GCAAGAAAGAAAAGCTTAAGGCCAGAAAAAGAGAGCTTAAGCAAAAAAGCAGAAAGACCAAAAACA	1624
QY	855	cggaacactaaaattacaactttcagctgctgcgaatgaagatatacagtaaacg	907
Db	1625	AGAGAACACCAAAAAACGAAAAAGCAGAAAAAGAAAGAGAAAGAACACGAAAAAG	1677

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RESULT 12
US-60-226-176-1976/c
; Sequence 1976, Application US/60226176
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, Macdonald
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
; FILE REFERENCE: GX-0013-1 P
; CURRENT APPLICATION NUMBER: US/60/226.176
; CURRENT FILING DATE: 2000-08-16
; NUMBER OF SEQ ID NOS: 2447
; SOFTWARE: PERL program
; SEQ ID NO 1976
; LENGTH: 186935
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GB:AC022322_3
US-60-226-176-1976

```

Query Match	1.68;	Score 57.6;	DB 55;	Length 186935;	
Best Local Similarity	40.48;	Pred. No. 0.19;			
Matches 691;	Conservative	0;	Mismatches 1015;	Indels 5;	Gaps 2;
QY 1959	tgctacaacggttcggtgtagcacaatcacatcaggtcaagttgctgtagtaaaagcgg	2018			
Db 8596	tgctgttgctgatacagtggtgctatcgcgttgctttgttatgttgctgttgctgctgc	8537			
QY 2019	tgcaaacctatctgctctctacagcaagtgacatcattccagctagtggtgaagcggttac	2078			
Db 8536	tgctactggttgctgctgctgctgctgctcttatgttgctgctgctgctgctgtgttac	8477			
QY 2079	tgttcaagatggaacatacaaaagtgaaagttgctgcttaaccaattagaacgtaaccaag	2138			
Db 8476	tgctgctattgttgctctgtgtgtgtgctgctgctgctgctgctgctgctgctgctgctg	8417			
QY 2139	gtacaattagtagtggttcggtaaagtgcaacagctctctgttaaaagtgctgcaaatgc	2198			
Db 8416	ctacta- tt actggttgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctg	8359			
QY 2199	aaactacttagcaactaactatattatatacatlltaacactgaaggtcaagacgtaacagc	2258			
Db 8358	tgctactatggtatattatgctgctgctgctgctgctgctgctgctgctgctgctgctgctg	8299			
QY 2259	accacaggttacaaagfatllcaaaagtgattctctttaaagacgctgtagtactactac	2318			
Db 8298	tactg	8239			
QY 2319	acttacgaacggttgtagcaggtcacaataatccactatccaatttagcggaagaattaaaaac	2378			
Db 8238	tattgctggtgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctg	8179			
QY 2379	ttctagtggttctttagtggtggtgcaaaagtaactgtcgagaataataacaaacagcatg	2438			

[illegible]

D _b	7101	TACTGTTGCTATTGGCTGTACTACTAGAGATCCTATTGTTGCTATTGCCTGTGCTGTA	7042
O _y	3519	agagagtglagaacgcagaccatgatgycagggtgctactaaaggagacattaglaattaacac	3578
D _b	7041	TGCTATTACTGTTGCCATACTCTGTTGCTGCTACTGTTACTGTTGCTGTTCCTATTACTAT	6982
O _y	3579	agttacctccttagtacttlgataaacgaagaactlataagattgttgtaagltggagttaa	3638
D _b	6981	TGTTGCTGCTGTTGCTTTTGTGTTGTTACTTGCTGCTGTTGTCACACTGATCCTTCTACTGT	6922
O _y	3639	agatgcagcaggaataatgttcagatactaatt	3669
D _b	6921	TGCTATTGCAGTTCCTGCTGTAATTACTGTT	6891

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RESULT 13
US-60-233-468-1976/c
; Sequence 1976, Application US/60233468
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, MacDonald
; APPLICANT: Valdes, Ana
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
; FILE REFERENCE: GX-0013-2 P
; CURRENT APPLICATION NUMBER: US/60/233,468
; CURRENT FILING DATE: 2000-09-18
; NUMBER OF SEQ ID NOS: 2488
; SOFTWARE: PERL Program
; SEQ ID NO 1976
; LENGTH: 186935
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GB:AC022322_3
US-60-233-468-1976

```

[illegible][illegible]

D _b	7101	TACTGTTGCTATTCGTCGTAACTACTAGAGATCCATAATTGGTCTAFTGCTGTGCTGC	TA	7042
OY	3519	agagagtgtagacgcagaccatgatgcaagglygtactaaagagacattagttaataaac		3578
D _b	7041	TGGTATTACTGTGCCATATCTGTTGCTGCTACTGTTACTGTTGCTGTTACTAT		6982
OY	3579	agttactcctttagtacttgataacagcaagaacttaagaattgttgaagtgaattaa		3638
D _b	6981	TGTTGCTGCTGTGGCTTTTGTTGTTGTTACTGCTGCTGTTGTCACTGATGCTTCTACTGT		6922
OY	3639	agatgcagcaggtaatgttcagatactaatt		3669
D _b	6921	TGCTATTGCAGTTGCTGCTGTAATTACTGTT		6891

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RESULT 14
US-60-313-371-1976/c
; Sequence 1976, Application US/60313371
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, MacDonald
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated with ADME Genes
; FILE REFERENCE: GX-0013-5 P
; CURRENT APPLICATION NUMBER: US/60/313,371
; CURRENT FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 2447
; SOFTWARE: PERL Program
; SEQ ID NO 1976
; LENGTH: 186935
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GB:AC022322_3
US-60-313-371-1976

```

Query Match	1.68;	Score 57.6;	DB 64;	Length 186935;
Best Local Similarity	40.48;	Pred. No. 0.19;		
Matches 691; Conservative	0;	Mismatches 1015;	Indels 5;	Gaps 2;

OY	1959	tgcatacaaccglttcgggtagcacaacatcacatacagctcaagtgtcgtagtaaaacggg	2018
Db	8596	TGCTGTTCGTGATACAGTGGCTATCGTTGCTTTTGTAATTGTGCTGTTGTTGCTCTGC	8537
OY	2019	tgcacaactatctgcctcttacagcaagtgcacatcatccagctagtglttgaagcggttac	2078
Db	8536	TGCTACTGTTGTTGTTGCTGCTGCTGCTCTTATTTGTTGCTGCTGCTGTTGCTGTTTAC	8477
OY	2079	tggtcaagatggaacatacaaaagtgaagaattgctctctaaccaattagaacgtaaccaagg	2138
Db	8476	TGCTGCTATTGTTGCTCTGTTGTTGTTGCTGATGCTGCTACTNGTTGCTAATGCTGTTGCTC	8417
OY	2139	gtacaattagtagtgtlbcygltaaagygtgcacacagctcclyllaaagatgctgcaaatgc	2198
Db	8416	CTACWA--TTACTGTTGCTATTGCTGCTGCTACTACGCTGGTGTGCTGCTACTGTTGT	8359
OY	2199	aatatctllagcaactaactatatactatacatlltacaactgaaagtcgaagacgtaacagc	2258
Db	8358	TGCTACTATGGAATAATTAATTGCTGCTGCTGCTGCTACTGTTGTTACTGTGATTTTCGTTC	8299
OY	2259	accaacggttacaaaagtatccaagygtatcctttaaaaaagacgctgatgcagttactac	2318
Db	8298	TACTGCTGCTGTTGCTGTTGTTAATTGTGATGCTATTGCTGTTGCTGATGCTTTTGTTGC	8239
OY	2319	acttacgaacgltgatgcaggtcnaaaatlctactatccaattlagcgaagaattaaaaac	2378
Db	8238	TATTGCTGTTGCTGTTGCTGATACTGTTGCTATTGTTGCTTTGTTGTTGTTGTTGTTGTT	8179
OY	2379	ttctagtgttcttcttagtgtggtgycgaagtaactgtcgagaanaattlaacaacaacagtatg	2438

Db	8178	TGCTGCTGCTGCTACTGTTGCTGTT--GTTGCTGCTCTTATTGTTGCTGCTGCTGTTGC	8122
QY	2439	ggtagatgctggtactggaacaactgatatcagttgctcctaagacagatgcaaatggtaa	2498
Db	8121	TGTTGTTGCTGCTGCTGTTGCTGTTTACTGCTGCTAATTGTTGCTGTTGCTGATGC	8062
QY	2499	agtaacagctgctgtgttatacatlaactggtccttgacaataacgacaaagatgcgaaatt	2558
Db	8061	TGTTGCTGTTGCTGATACGTGTTGCTATCGTTGCTTTTGTTATTGTTGCTGTTGTTGCTGC	8002
QY	2559	gcgctcgtgtagtagataagtcctcactgatatggaatcgtgatgtagctggtataat	2618
Db	8001	TGCTGCTACTGTTGTTGATTGCTGCTGCTGCTCTTATTGTTGCTGCTGCTGTTGCTGTTGT	7942
QY	2619	taagaaaaagatatatttaattcgtltacacacagctgagacacacactgtagctctgtgaa	2678
Db	7941	TGCTGATGCTGCTACTGTTGCTATTGCTGTTGCTGCTGCTAATTACTGTTGCTATTGCTGC	7882
QY	2679	agctgctgctgacaaaagatggttcaaacgccttcctgctgcatlcccaacaagcaclycaat	2738
Db	7881	TACTATTGCTGCTGCTGCTGCTGCTGCTACTGTTGTTGCTACTATGGTAATGATTGCTGCTGC	7822
QY	2739	tgatacaactaagagcttattagttgaattcaatgaaactgattlagcggaagttaaacc	2798
Db	7821	TGCTGCTGCTACTGTTATTACTGCGATTTCGTGTTGCTACTGCTGCTGTTGCTGTTGCTGT	7762
QY	2799	tgagaacatcgttgtttaaagatgcagcaggtaatgcygtagctgtagctgtaacagcat	2858
Db	7761	GCGTATTGTTGCTGCTGTTGTTAATTGATGATACTAATTGCTGCTGCTGCTGCTGTTGCTAT	7702
QY	2859	agacggtcctlacaataaatttgtattcaactccatcctaagaalttaaagctggtacagt	2918
Db	7701	TGCTGTTGCTGCTACTGTTGCTATTGTTGCTTTTGTTATTGTTGCTCTTGTGTTGCTGCTGC	7642
QY	2919	ttaactcgtlaacaattgacggtgtgagagataaagtgtaaacaalctctaataacat	2978
Db	7641	TGCTACTGATGCTGTTGCTGCTAATTATTGTTGCTGCTGCTGTTGCTGTTGTTACTGCTGC	7582
QY	2979	tacttcgttcaagactgtaatcgtcgaatccaacgttatcctcaatcagcattgctgcagc	3038
Db	7581	TATTGTTGCTGTTATTGTTGCTGATGCTGCTACTGTTGCTATTGCTGTTGCTGCTACTAT	7522
QY	3039	tgcagtttaacglttgaccgltcttaaaaaacaattacaattgaaattcagcgattcagttccaa	3098
Db	7521	TACTGTTGCTATTGCTGCTGCTACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTAT	7462
QY	3099	cccaacaatcacctcttlaagaagcctgcagcgaactlcatlactaattacactttagtaaa	3158
Db	7461	GGTAAATGATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	7402
QY	3159	tgtataatatgaaaataaacaatacaaaaattgtattccaacaaaggtgtaacacattgcga	3218
Db	7401	TGCTGCTGCTGCTGTTATTGCTGCGACTCTCTGTTGTTGCTACTGCTGATTTTGCTAATTTC	7342
QY	3219	gttactcataatgagttagcaglttccaagaattlccaactggtactgatatgtag	3278
Db	7341	TGTGGCTAATTGTTGCTGCTGTTGTTGCTCTTAATTGATGATGTTGATTCTGTTGCTAT	7282
QY	3279	caaaagttacattcatcacaggttctgltgctactgcagaagtaaaaaacctgctcagtagg	3338
Db	7281	TGTTGCTGCTATTGCTAAAAATTGTTGCTGCTGTTGTTGCTATTGTTGTTGTTGTTTAC	7222
QY	3339	cgttggtlcatggaatggaacaagctataactcaggaatgctgcagcaacacgactcggtc	3398
Db	7221	TGTTTCTGTTGCTTTTGTATTGTTGCTGCTGCTGCTGCTGTTGCTGCTGCTGCTGATGC	7162
QY	3399	tgtagctgacttcglttcgagagccagttgcacctccaattlccagaaggtatcgattaac	3458
Db	7161	TGTTACTGTTACTATTGCTATTACTGATACTAATTGTTGCTGCTGCTGCTGCTGCTGCTGCTGC	7102
QY	3459	gaatgcaactgtgacagtaacaataataactgatatgataaaaaactgltgaagttattlccaa	3518
Db	7101	TACTGTTGCTATTGCTGTTACTACTGAGGATCCCTAATTGTTGCTATTGCTGCTGTTGCTGCTGA	7042

[illegible]

OY 3519 agagagtgtagaacgcagaccatgatcgacggtgctactaaaggagacattagttaattacaac 3578
| | | | | | | | | | | | | | | |
Db 7041 TGGTATTACTGTGTTGCCATATCTGTTGCTGCTACTGTTACTGTTGCTGTTGCATTACTAT 6982

OY 3579 agtcaactccttagtacctgatacacgaagaactataagatttgttaagtgagttaa 3638
| | | | | | | | | | | | | | | |
Db 6981 TGTTGCTGCTGTTGCTTTTGTTGTTGTTACGCTGCTGTTGTCACTGATGCTTCTACTGT 6922

OY 3639 agatgcagcaggttaattgttcagataactaat 3669
| | | | | | | | | | | | | | | |
Db 6921 TCGTATTGCAGTTGCTGCTGCTGAATTACTGTT 6891

```

RESULT 15
US-09-407-679-1
; Sequence 1, Application US/09407679
; GENERAL INFORMATION:
; APPLICANT: Tomasz, Alexander
; APPLICANT: Delencastre, Herminia
; TITLE OF INVENTION: AUXILIARY GENES AND PROTEINS OF METHICILLIN RESISTANT
; FILE REFERENCE: 600-1-139DIV
; CURRENT APPLICATION NUMBER: US/09/407,679
; CURRENT FILING DATE: 1999-09-28
; EARLIER APPLICATION NUMBER: 08/678,614
; EARLIER FILING DATE: 1996-07-10
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 4248
; TYPE: DNA
; ORGANISM: Staphylococcus aureus
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (154)..(1410)
; OTHER INFORMATION: Open Reading Frame
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1497)..(3500)
; OTHER INFORMATION: Open Reading Frame
US-09-407-679-1

```

[illegible]

Db	2892	gttaaacctgcagctgtgatacgygaagtagaanaacgcataataatcacgyltaaacagaanaatt	2951
QY	472	cacaaaattccttatgaaattaaactcgcacagctcatttagatcgcgtatagyltaa	531
Db	2952	caaatagcaatgcttcacactacagaagaanaaacagctgcataatacagaatttagatact	3011
QY	532	acaactcgtgatttacttcgcctcacatttaagcnaaaagcacagaacttcgcgcacagc	591
Db	3012	aaaaagcaagaagcaagaaacaaatcttgatgtcgtgcnaataacaaacagtgatgttaacca	3071
QY	592	ttaatttatgatatattaccglttgcaatgaaagcgcgcggaagtacaaagacgcctgtaagca	651
Db	3072	gctaaagacaatagatattgtctgcnaattaatcaagtlccaagctgcacaactaagaanaatcg	3131
QY	652	ggcaatttagacaaagctaaagctgctgtgtgatccaatccaatccaatactaccnaaagta	711
Db	3132	g--atgcnaaagcggnaaaatcgcctcaaaaaagcaagtlgaacgyltaaaacagcaattgaa	3188
QY	712	acagatgcttccaactgaaactaaacagaaagtagcgaanaaaagcattagatgcagatgaa	771
Db	3189	atgaatgatctgcactacgtgaagaacacaaagcagcgaagaagacaagltgatcagcagta	3248
QY	772	gctgcgcttactccnaaagltgaaagtgtaagtgtagtggaattcaactccaanaaagctgtt	831
Db	3249	gttactgcnaacgcgtgatatagataatgtctgcagcaacaaatgtgtgataatgcaaaa	3308
QY	832	gaattaacagcagctacacggtgaaacgcgaacactaanaattacaactl---cagctgctg	886
Db	3309	ctacaanaatgaagctacaatcgcagccattacacctgatatgcnaaatgtttaaccagcagcaa	3368
QY	887	caaatgaagatacagtaaacgyltaaatatactgtacgtatactataaagtgagcgytaacatc	946
Db	3369	aacaaagcaatlgcagataaagtlacaagctccaagaaacagcaaltgtatggaataaacygct	3428
QY	947	catttgcccttaalacgcgagatglttcttatacagaacggaanaactatcacgttg	1006
Db	3429	caacaaactgaagaaagcagctgtctaaacacaaagtlccaactgnaaaaaacacacagctg	3488
QY	1007	atgcttcaactccattcgaanaataatacgcgagataaagtagtagtlttaaggtltaaag	1066
Db	3489	atgccgcaatagatgcagccacatacaaatgcggaagtlgaagcgcgttaaaaaagcagcaa	3548
QY	1067	acaaaaatgcaagaattttaaagaagatgcatlcaacttccaagcttcgnaatgtgtctg	1126
Db	3549	tgtctaaanaattgaagcgcgattcagccagcaacaaacacttaagaataatgcaagaagcaa	3608
QY	1127	tagttactcaagtgtttcgaaactaatgtlaacaa-----acaacacttctg	1171
Db	3609	tgtctacgaaagcgaatgtgaacgyltaaaacagcaatcgcctcaaacgcgaagacattactgctg	3668
QY	1172	taaaactlagcagcagtlacttgcgaactgcagatcactttaaacagtagtattgataagt	1231
Db	3669	aagaaattgcagcgcgttaatgcgcgagtagataatgtctgtaacaaagcaaatgcaaca	3728
QY	1232	tgttagcacctgnaaactgtaaacacagctcgaaagcttactattacagatgttgaaacgtgaa	1291
Db	3729	tgtgaagctgttaatagtcnaaaatgtagtagccaagcgnaaaacgcagcgtgnaaatagta	3788
QY	1292	aaagcattccagtaattgcatctacttctgttctacaattactattacgyltaaaaagaag	1351
Db	3789	ttgatcaagtaacacccaacagtltaataaaaaagcaactlgcacgttaatgnaatccacagcaa	3848
QY	1352	cgttagtaactcgtgtaaaacataataaactcgtcatcaataatgltaaaacattactggtt	1411
Db	3849	ttttaaataacaaatlgcaagagalttcaagctlacgcagatgcaacagatgaagaaaaaac	3908
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